

REMARKS

Claims 1-19 are pending in the application and stand rejected. Claims 1 and 9 have been amended. In view of the above amendments and following remarks, reconsideration and allowance of Claims 1-19 are respectfully requested.

The Rejection of Claims 1, 6-8, and 17-19 Under 35 U.S.C. § 102(b)/103(a)

Claims 1, 6-8, and 17-19 stand rejected under 35 U.S.C. § 102(b)/103(a) as anticipated by or, in the alternative, as obvious over U.S. Patent No. 5,562,740, issued to Cook et al., as evidenced by Farr et al. Withdrawal of the rejection is requested for the following reasons.

As amended, Claim 1 recites individualized, whitened crosslinked cellulosic fluff pulp fibers comprising fibers treated with a crosslinking agent, a whitening agent that comprises one or more dyes, and a bleaching agent. Claims 6-8 depend from Claim 1. Claim 17 relates to an absorbent product comprising the fibers of Claim 1. Claims 18 and 19 depend from Claim 17.

The Cook reference describes bleaching citric acid crosslinked fibers using hydrogen peroxide and sodium hydroxide. The Cook reference does not disclose treating fibers with a whitening agent comprising one or more dyes. The Farr reference is cited as teaching that a bleaching agent whitens a substrate by chemical reaction. Farr states that

[t]he bleaching reactions usually involve oxidative or reductive processes that degrade color systems. These processes may involve the destruction or modification of chromophoric groups in the substrate as well as the degradation of color bodies into smaller, more soluble units that are more easily removed in the bleaching process.

Applicants agree that a bleaching agent acts on a substrate through a chemical reaction that degrades and/or removes the colorant. Applicants also agree that the fibers produced by the bleaching described in the Cook reference have had color systems degraded and/or removed by chemical reaction that destroys the colorant.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

In contrast to the Cook fibers that have been bleached, the claimed fibers are not only treated with a bleaching agent, but also treated with a whitening agent comprising one or more dyes. Therefore, in addition to whitening the fibers through chemical reaction by treatment with the bleaching agent, the claimed fibers are also whitened by treatment with one or more dyes. The dyes used to treat the fibers from which the product fibers are made do not degrade colorants present in the fibers and do not destroy or modify the chromophoric groups in the fibers, but rather, unlike a bleaching agent, mask the color of the fibers. Therefore, the claimed fibers are distinguishable from the bleached fibers described by the Cook reference. The claimed fibers are treated with two agents: (1) a whitening agent comprising one or more dyes, and (2) a bleaching agent. The whitening agent masks color. The bleaching agent degrades color.

Because the Cook reference fails to exactly describe the fibers as now claimed, the reference is not anticipatory and withdrawal of the rejection is respectfully requested. Furthermore, because the cited reference fails to teach, suggest, provide any motivation to make fibers that are both whitened (with one or more dyes) and bleached, the invention as now claimed is nonobvious and patentable over the cited reference.

The Rejection of Claims 1-3, 6-10, and 13-19 Under 35 U.S.C. § 103(a)

Claims 1-3, 6-10, and 13-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,562,740, issued to Cook et al., in view of the Casey and Biermann references, and further in view of U.S. Patent No. 6,300,259, issued to Westland et al. Withdrawal of the rejection is requested for the following reasons.

As noted above, Claim 1 has been amended to recite individualized, whitened crosslinked cellulosic fluff pulp fibers, comprising cellulosic fluff pulp fibers treated with a crosslinking agent, a whitening agent comprising one or more dyes, and a bleaching agent. Claims 2, 3, and 6-8 depend from Claim 1.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Claim 9 relates to a method for making whitened crosslinked cellulosic fluff pulp fibers. Claims 10 and 13-16 depend from Claim 9.

Claims 17-19 relate to an absorbent product comprising the fibers of Claim 1.

The Cook reference is cited for teaching bleached crosslinked cellulosic fibers. The Casey and Biermann references are cited for their teachings of whitening fibers by the addition of blue dye. The Westland reference is cited for teaching a method for forming a crosslinkable cellulosic fibrous product (e.g., fibrous web treated with a crosslinking agent) and that the fibers useful for making the fibrous product may be pretreated with a dye or that the fibrous product can be subject to post-treatment processes.

The Westland reference fails to teach or suggest individualized crosslinked fibers or a method for making individualized crosslinked fibers. The fibrous product described in the Westland reference is a fibrous web (e.g., a rolled fibrous sheet, see Claim 1). The crosslinkable cellulosic fibrous product can be formed as a web or sheet that has structural integrity and sheet strength sufficient to permit the fibrous web to be rolled, transported, and used in roll form in subsequent processes. See Col. 2, lines 1-5. The crosslinkable fibrous product can be converted into a crosslinked fibrous product by subjecting the product to conditions sufficient to effect interfiber crosslinking by, for example, heating to a temperature sufficient to cure the crosslinking agent. See Col. 2, lines 20-25. Thus, in one embodiment, Westland provides a web of crosslinked fibers (fibers that are crosslinked in the web). Alternatively, the fibrous product can be fiberized, for example, at a manufacturing site remote from initial web formation, and the resulting individual crosslinkable fibers can be combined with other fibers and/or other materials to provide a fibrous web containing crosslinkable cellulosic fibers, among other materials. See Col. 2, lines 26-34. Subjecting that web to crosslinking conditions provides a fibrous web that includes, in addition to other fibers and materials, crosslinked cellulosic fibers. See Col. 2,

lines 35-38. Thus, in another embodiment, Westland provides a web of crosslinked fibers (fibers that are crosslinked in the web) that further includes other materials.

The Westland reference fails to describe individualized, crosslinked cellulosic fibers or any method for making individualized crosslinked fibers.

The Cook reference describes individualized, bleached crosslinked fibers. The Westland reference describes a fibrous web or sheet that includes fibers treated with a crosslinking agent or a crosslinked fibrous web or sheet. The Cook reference fails to teach or suggest a crosslinked fiber treated with a whitening agent comprising one or more dyes. The Westland reference fails to teach or suggest individualized, crosslinked fibers treated with either a whitening agent or a bleaching agent. Applicants submit that there is no teaching, suggestion, or any motivation to combine the teachings of the Cook (individualized, bleached crosslinked fibers) and Westland (crosslinked fibrous web) references. Furthermore, the teachings of the Casey and Biermann references do not cure this deficiency.

Applicants believe that amended Claim 1 and its dependent claims are nonobvious and patentable over the cited references.

Claim 9 recites a method for making individualized, whitened crosslinked cellulosic fluff pulp fibers. In the method, a whitening agent, crosslinking agent, and optional catalyst are applied to a web of fluff pulp fibers; the web of treated fibers is separated into individualized treated fibers and then cured to provide individualized crosslinked fibers to which is then applied a bleaching agent.

The cited references fail to teach or suggest the claimed method because the cited references fail to teach or suggest applying a whitening agent and a crosslinking agent to a web of fibers, individualizing the fibers, curing the individualized fibers, and then bleaching the individualized crosslinked fibers. None of the cited references teach combining a whitening

agent and a crosslinking agent to a fibrous web and then separating the treated web into individualized treated fibers. The Cook reference does not teach or suggest the use of a whitening agent. The Westland reference does not teach or suggest the use of a whitening agent or individualizing a treated web to provide individualized treated fibers. The Casey and Biermann references fail to cure the deficiencies of the teachings of the Cook and Westland references.

Because the cited references, either alone or in any combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the claimed method, the claimed method is nonobvious and patentable over the cited references.

The Rejection of Claims 4, 5, 11, and 12 Under 35 U.S.C. § 103(a)

Claims 4, 5, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Cook, Casey, Biermann, and Westland references as applied to Claims 1-3 and 9-11 above, and further in view of the Chudgar reference and U.S. Patent No. 5,512,064, issued to von der Eltz et al. Withdrawal of the rejection is requested for the following reasons.

Claims 4 and 5 depend from Claim 1, and Claims 11 and 12 depend from Claim 9. For the reasons stated above with regard to Claims 1 and 9, the teachings of the Cook, Casey, Biermann, and Westland references fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention of Claims 1 and 9. The teachings of the Chudgar and von der Eltz references fail to cure the deficiencies of the teachings of the Cook, Casey, Biermann, and Westland references noted above.

Because the teachings of the cited references, either alone or in any combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the claimed invention, the claimed invention is nonobvious and patentable over the cited references. Withdrawal of this ground for rejection is respectfully requested.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

The Provisional Double Patenting Rejection

Claims 1-19 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-14 of co-pending U.S. Application No. 10/815,159, in view of the Cook and Farr et al. references. Applicants will file a Terminal Disclaimer once there is an indication of allowed subject matter.

The Double Patenting Rejection of Claims 1-3 and 6

Claims 1-3 and 6 stand rejected on the ground of obviousness-type double patenting as being unpatentable over Claims 1, 3, 6, and 7 of U.S. Patent No. 6,893,473, issued to Neogi et al., in view of the Cook and Farr references. Applicants will file a Terminal Disclaimer once there is an indication of allowed subject matter.

CONCLUSION

In view of the above amendments and foregoing remarks, applicants believe that Claims 1-19 are in condition for allowance. If any issues remain that may be expeditiously addressed in a telephone interview, the Examiner is encouraged to telephone applicants' attorney at 206.695.1755.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}



George E. Renzoni, Ph.D.
Registration No. 37,919
Direct Dial No. 206.695.1755

GER:md

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100